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ABSTRACT

An investigation was made to determine the effect of an observation instrument on student teacher performance of Active Teaching Behaviors (ATB) focusing on how the teacher introduces, carries out, and concludes classroom instruction, and how the teacher maintains student engagement. Cooperating teachers were observed teaching mathematics and ranked as high or low in ATB. They then used the observation instrument in observing their student teachers teaching mathematics. They also shared the observation sheet with the student teacher and provided a set of definitions and examples of the behaviors to be observed. Results indicated that the use of an observation instrument in tandem with a cooperating teacher who displays high ATB may increase desirable teaching behaviors. Placement of a student teacher with a cooperating teacher with low levels of ATB who fails to use the observation instrument may result in a loss of desirable behaviors. (JD)

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# THE EFFECT OF AN OBSERVATION INSTRUMENT ON STUDENT TEACHER PERFORMANCE OF ACTIVE TEACHING BEHAVIORS

FAR WEST LABORATORY FOR
EDUCATIONAL RESEARCH AND DEVELOPMENT

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# THE EFFECT OF AN OBSERVATION INSTRUMENT ON STUDENT TEACHER PERFORMANCE OF ACTIVE TEACHING BEHAVIORS

## BACKGROUND

Under a grant from the National Institute for Education, the Far West Laboratory for Educational Research and Development selected three geographic sites to participate in a project designed to apply and utilize research in elementary teacher education: Applying Research To Teacher Education: Research Utilization In Elementary Teacher Education (ARTE/RUETE). The three sites were: Mills College, Oakland, California; University of Utah, Salt Lake City, Utah; and, the University of Nevada, Reno, Nevada.

The project was conceptualized as a two-phase activity. Phase One, December, 1982--November, 1983, is the focus of this paper. Within Phase One were multiple tasks. They were: Establish a Regional Teacher Education Team; develop a Situational Analysis at each of three sites; and, develop a Research Design that seeks to determine the effectiveness of various strategies for the utilization of findings from research on effective teaching. Finally, each site was to develop a Teacher Education Academy.

The focus of this paper is on findings related to the investigation of strategies designed to determine the effect of an observation instrument on student teacher performance of active teaching behaviors.

## SITUATIONAL ANALYSIS

The purpose of the Situational Analysis was to provide background data against which to evaluate changes which might occur subsequent to the project activities and to reveal the depth of knowledge of faculty, students and cooperating teachers on the topic of effective instruction.

The Situational Analysis at the College of Education at the University of Nevada, Reno was primarily a demographic study. This paper will report only those factors from the Situational Analysis which appear to be most relevant as a background against which to consider the findings of this study.

The Situational Analysis revealed that the median age of the elementary student teacher is 26 years and she earns more in her outside job as a casino worker than she can expect to earn in her first contractual job with a Nevada school district.

While probably not materially different from other semesters, the Situational Analysis revealed the general inclination of student teachers to request assignments in the primary grades (Grades 1-3). Of 33 student teaching applications for fall, 1983, 23 requested an assignment in the primary grades.

The Situational Analysis also served to recognize that student teachers are not always placed within a cadre of teachers experienced in the supervision of student teachers. Rather, many new cooperating teachers are used each semester in an effort to provide as many different teachers as possible with the experience of having a student teacher. This fact may be of greater value to the local school district than to the student teachers. The student teacher represents additional classroom help for a fifteen-week period.

The failure of the College of Education to utilize a cadre of teachers experienced in the supervision of student teachers becomes more prominent when considering the implications of this study for the selection and utilization of future cooperating teachers.

Another finding of particular interest to the total ARTE/RUETE Project is the information obtained from faculty, students, and cooperating

teachers about their knowledge of research on effective instruction.

For the purposes of this project, effective instruction is limited to the inclusion of those classroom activities and procedures which include: General student participation styles, activity structures including grouping, academic learning time, active teaching behaviors and classroom management.

Interviews with the 28 local cooperating teachers designated to work with student teachers in the fall revealed that the majority of them were not familiar with the research topics or findings in the area of effective instruction. Interviews with the 28 student teachers who were to student teach in the urban Reno area during the fall semester showed a shift of emphasis in their responses from the "lack of knowledge" response displayed by the cooperating teacher to at least an "awareness" level. That is, they knew they had encountered the topic in their coursework. When student teachers were asked if they had a "thorough understanding," they became much more conservative in their responses. The only topic having ratings as strong as the category of "have encountered" is in the topic of "Active Teaching Behaviors." In this topic more students indicated they had a "thorough knowledge." It is conjectured this strong showing may have been due to a familiarity with the phrases used in describing Active Teaching Behaviors, i.e., lesson planning, explanations and demonstrations, etc.

When the five faculty members of the College of Education most directly involved with the undergraduate teacher preparation program were interviewed, their strongest area of unfamiliarity was with the concept of Academic Learning Time. The most familiar area of knowledge to the faculty was on the topic of Active Teaching Behaviors. Again, this may have been familiarity with the descriptive terminology, rather than the behavioral applications in the classroom.

The results of these interviews are tabulated and presented in Figure 1. Along the left axis of the tabulations may be found the five topics defined by the project as effective instruction. Heading the topics, also on the left margin, are the three respondent groups (Faculty, Student Teacher, Cooperating Teachers). Since the interview questions were directed to different audiences, the phrases used to describe their use, or knowledge of, the topics were adjusted accordingly. These phrases are shortened for purposes of tabular presentations and appear across the top of the column of figures. The tabulations would therefore be read: Twenty percent of the faculty (F) had "not heard of" Student Participation Style. The columnar entries express the level of knowledge for each topic and the percentage of respondents having that level of knowledge. It should be noted that Column 5 relates to use of the research findings. The percentages represent the faculty who stated they "did not cover the findings in class."

From the preceding information, it would seem that the topic of Academic Learning Time might be the topic offering the most promise for instructional development and research. However, the opportunity for immediate observational data, the possibility for intervention in the ongoing classroom scene, the investigator's interest in student teaching activities, the opportunity for inclusion of this topic in the teacher preparation curriculum and the thrust of research at Mills College and the University of Utah gave the Active Teaching Behaviors topic primacy for investigation.

## LITERATURE REVIEW

This literature review is not intended to be a comprehensive review of the broad topics of the research on effective instruction, Active Teaching Behaviors, Direct Instruction or the interactive effects of student teacher and cooperating teacher personality styles. Rather, it is

FIGURE 1

STUDENT TEACHER, COOPERATING TEACHER, FACULTY KNOWLEDGE OF

EFFECTIVE INSTRUCTION TOPICS

| Faculty: | (1) Not Heard Of | | | (2) Have Encountered | | | (3) Read About-Interested | | | (4) Extensive Rdg. | | | (5) Do Not Cover | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stu. Tch: | Not Encountered | | | Introduced To | | | Thorough Understanding | | | Apply in Class, S.T. | | | Used As Grade | | |
| Co-op Tch: | Not Familiar | | | Know About Don't Use | | | Knows and Uses | | | Discuss with S.T. | | | S.T. Must Demo | | |
| | CO* | ST** | F*** | CO | ST | F | CO | ST | F | CO | ST | F | CO | ST | F |
| Student Participation Style | 66% | 28% | 20% | 0% | 57% | 20% | 20% | 5% | 20% | 13% | 5% | 40% | 0% | 5% | 20% |
| Activity Structure | 60% | 10% | 0% | 6% | 52% | 40% | 20% | 14% | 20% | 13% | 14% | 40% | 0% | 10% | 20% |
| Academic Learning Time | 60% | 47% | 0% | 6% | 38% | 60% | 13% | 0% | 40% | 6% | 10% | 0% | 0% | 5% | 40% |
| Active Teaching Behaviors | 60% | 14% | 0% | 0% | 28.5% | 20% | 13% | 28.5% | 20% | 27% | 19% | 60% | 0% | 10% | 0% |
| Classroom Management | 60% | 33% | 0% | 0% | 52% | 0% | 13% | 10% | 80% | 13% | 0% | 20% | 13% | 5% | 20% |

NOTE: * CO = Cooperating Teacher (N = 28)

** ST = Student Teacher (N = 28)

*** F = Faculty (N = 5)

confined to the literature most relevant to the questions being asked in this study.

The design of this study, the choice of procedures and the topic for investigation rests heavily on the literature. The purpose of the ARTE/ RUETE Project is to apply research in pre and in-service education. The question might be asked: What is the best, or possibly the most efficient, method of effecting change in teaching behaviors so as to bring about Effective Instruction? Is the best method the intensive, interactive training of pre-service students in tandem with their cooperating teachers prior to the commencement of student teaching? Or, is it possible to effect changes while the student teacher and cooperating teacher are working together in the ongoing day-to-day classroom environment?

As most supervisors of student teachers know, the cooperating teacher is a major factor in the teaching style and behavior of student teachers. Seperson and Joyce (1973) found in their study of teaching styles that the influence of the cooperating teacher was felt early in the student teaching experience, rather than being slow and cumulative. In discussing their research, they conjecture that the environmental setting into which the student teacher comes may be a strong determiner of the student teacher's behavior. As an example, they cite the classroom environment in which children are organized into small groups versus the rows and aisles classroom structure. In the one case the student teacher must immediately be a facilitator, while in the other the student teacher must be a lecturer displaying didactic styles.

Willis D. Copeland (1978) examined the effect of the cooperating teacher on the student teacher from two perspectives. The first was from a social learning theory and the second was from an ecological system defined as, "that network of inter-connected processes and events which

impinges upon behavior in the teaching environment." In the first approach, the teacher models the behavior and the student teacher copies it. In the second, the cooperating teacher's use of a skill so shapes the classroom environment that the student teacher's use of the same skill, if learned elsewhere, is supported and facilitated.

Copeland found that the classroom ecological system had a significant effect on the student teacher's utilization of the target skill. Copeland found that the modeling of a particular behavior by the cooperating teacher had little effect on the student teacher.

These two citations from the literature raise the question of what will be the behavior of a student teacher placed with a cooperating teacher who displays the Active Teaching Behaviors? Similarly, what will be the behavior of the student teacher placed with a cooperating teacher who does not display the Active Teaching Behaviors? Must a student teacher and cooperating teacher receive formal, simultaneous training to effect the Active Teaching Behaviors?

Two additional pieces of literature that impinge upon this study are citations in an article by Thomas Good (1979). In his article, Good refers to a study by Crawford and Stallings in which a group of teachers were trained two different ways. The groups were designated "minimal" and "maximal." The "minimal" training group received printed materials and a self-administered test on the training program. The "maximal" training group received the same packets and test, but also participated in meetings with the research staff and other teachers to discuss, practice, role play and watch video tapes illustrating criterion behaviors. It was found that the "minimal" teachers implemented the program better than "maximal" teachers.

Lest the preceding be too simplistic and too loaded with the implication that all one needs is a training manual to produce results in excess of those attained by teachers who have participated in comprehensive training, Crawford and Stallings also found that the "mimimal" group had greater verbal abilities and a self-reported structuredness of teaching style than did the "maximal" group, as a whole.

A study conducted by Anderson, Evertson and Brophy (1978) sought to determine if monitoring of teachers was necessary for increasing student gains. At the end of the experiment, it was found that the two treatment groups (observed and unobserved) had significantly higher adjusted achievement gains than the control group. In other words, the treatment had an effect that was not moderated by the presence of observers.

The preceding references, the Situational Analysis and the procedures being implemented at the two other project sites (Oakland, California and Salt Lake City, Utah) helped establish the problem for investigation. The references indicate the strong effect the cooperating teacher has upon the student teacher's behavior. Other research cited seems to indicate that the intensive use of protocol materials, workshops and monitoring of teacher behavior may not be necessary to effect instructional change.

The Situational Analysis served to establish the levels of knowledge of the various components of effective instruction displayed by the faculty, the student teachers and the cooperating teachers. While Active Teaching Behaviors terminology triggered greater response levels of familiarity, there was some question as to whether the actual behaviors are as well known.

Finally, the structure of the activities at the Mills College site and the University of Utah site offer excellent comparison procedures for this study. It should be noted that the evolution of the research designs at the three sites were collaborative and interactive. Therefore, they

served as excellent contrasting models.

STATEMENT OF THE PROBLEM

Given the association of a cooperating teacher strong in the use of Active Teaching Behaviors (ATB) with a student teacher untrained in ATB: Will the student internalize and manifest those behaviors without the intervention of an ATB observational instrument which stresses the Active Teaching Behaviors?

Similarly, will the use of an observation instrument yield a higher level of the use of ATB in the student teacher who is associated with the cooperating teacher who is high in ATB?

Conversely, given the association of a cooperating teacher low in the use of Active Teaching Behaviors with a student teacher untrained in ATB, will the use of the ATB observational instrument cause the student teacher to display higher levels of ATB than a student teacher in a similar pairing, but not using the ATB observational instrument?

PROCEDURE

In early September, 1983, a letter was sent to each cooperating teacher in the elementary education program (Appendix A) asking his or her permission to observe the teaching of mathematics. Teachers granting permission to observe constituted the initial sample for this study (N=28). The topic of mathematics was chosen for observation because of the relatively clear-cut teaching behaviors, the generally limited number of concepts introduced at one time, and because previous investigation of ATB were most frequently conducted on mathematics instruction.

Beginning the week of September 12, 1983, each cooperating teacher was observed teaching mathematics on three different days. Immediately following those observations, each student teacher was observed teaching mathematics one time. At the conclusion of each observation using the ATB

Observation Sheet (Appendices B and C), a summary statement describing the general procedures employed in the classroom were recorded and transcribed. These procedures provided an empirical and naturalistic record of the classroom.

The teachers for whom a complete set of observations were obtained were rank ordered and divided into the categories of high ATB and low ATB. They and their student teachers were then assigned to one of four treatment cells (Figure 2).

FIGURE 2

| | Student Teacher | Student Teacher |
|---|---|---|
| Cooperating Teacher High ATB | Observation Instrument | Non-Instrument |
| Cooperating Teacher Low ATB | Observation Instrument | Non-Instrument |
| | Student Teacher | Student Teacher |

Beginning mid-November, 1983, each cooperating teacher designated to receive the observation instrument, whether high ATB or low ATB, was visited and asked to utilize the instrument in observing the student teacher teach mathematics. Furthermore, the cooperating teacher was asked to share the observation sheet with the student teacher and to provide the student teacher with a set of the definitions and examples of the behaviors to be observed (Appendices B and C).

Beginning the last week in November, the student teachers who had not received the observation instrument were observed one time for control data.

Beginning the first week in December, those student teachers who had received the observation instrument were observed one time for post-intervention data.

All observations on student teachers and cooperating teachers were conducted by the same individual. This observer had been trained in the use of the observation instrument with video tapes and in actual classroom situations. Observer reliability was .89.

The trained observer was not informed which of the student teaching sites were designated as high ATB or low ATB. However, there is little doubt the observer knew or suspected which of the sites had been provided the observation instrument and which site had not.

As a result of incomplete observations and loss of student teachers, the final sample size was 22 student teachers.

Data was analyzed according to the level of Active Teaching Behaviors and the use or non-use of the observation instrument. Each data cell was submitted to chi square analysis with three degrees of freedom.

## RESULTS AND DISCUSSION

The results of this study are displayed in Figure 3. All four cells reached levels of significance between pre and post observations of the dependent variable (Frequency of Behaviors) as mediated by the introduction of, or withholding of, the observation instrument.

The numerals across the top of the cell identify the categories of behavior on the ATB Observation Sheet (Appendix C). These categories are 1) Introduction, 2) Instruction, 3) Closure and 4) Maintenance.

Because of the relatively low pre or post frequency in Category Three, the level of significance for each of the cells is somewhat questionable and probably unduly influenced by Category Three.

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(I) Hi ATB -- Instrument

| | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Pre | Freq. | 8 | 434 | 0 | 82 |
| | % | 36.4 | 53.4 | 0 | 7.9 |
| Post | Freq. | 14 | 378 | 6 | 117 |
| | % | 63.6 | 46.6 | 100.0 | 58.8 |

Significance -- .0005

(II) Hi ATB -- Non-Instrument

| | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Pre | Freq. | 7 | 464 | 1 | 97 |
| | % | 53.8 | 54.8 | 100.0 | 39.1 |
| Post | Freq. | 6 | 383 | 0 | 151 |
| | % | 46.2 | 45.2 | 0 | 60.9 |

Significance -- .0002

(III) Low ATB -- Instrument

| | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Pre | Freq. | 4 | 330 | 1 | 35 |
| | % | 20.0 | 49.4 | 100.0 | 31.3 |
| Post | Freq. | 16 | 338 | 0 | 77 |
| | % | 80.0 | 50.4 | 0 | 68.8 |

Significance -- .0002

(IV) Low ATB -- Non-Instrument

| | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Pre | Freq. | 19 | 408 | 5 | 36 |
| | % | 79.2 | 53.3 | 100.0 | 52.9 |
| Post | Freq. | 5 | 357 | 0 | 32 |
| | % | 20.8 | 46.7 | 0 | 47.1 |

Significance -- .0146

Cell Number I, High ATB Instrument, reveals a marked increase in the frequency of behaviors in Categories One, Three and Four. Category Two shows a decrease in behaviors. Analysis of the frequency of the individual behaviors which comprise Category Two reveals a 54% decrease in the specific behavior identified as: Illustrated, Modeled, Demonstrated. There is no explanation for this decrease.

Cell Number II, High ATB Non-Instrument, displays relative stability across Categories One, Two and Three. Category Four displays a marked increase in Maintenance behaviors. Analysis of the frequency of the individual behaviors in Category Four reveals a large increase in the behaviors identified as: Signalled and Disciplined. The same increase in these two behaviors is present in Cell Number I.

Cell Number III, Low ATB Instrument, displays relative stability of the frequency of behaviors in Categories Two and Three. Categories One and Four display marked increases in the frequency of behaviors. Again, as in Cells I and II, the increase in the frequency of behaviors in Category Four is most evident in the behavior identified as: Signalled and Disciplined.

Cell Number IV, Low ATB Non-Instrument, displays a decrease in Categories One, Two, Three and Four. The decrease in the frequency of behaviors in Category Four is less than in the other three categories. Inspection of the behaviors within Category Four reveals that there was a higher level of the behavior identified as: Scanned Room, in the initial observation of student teaching behaviors and considerably less in the concluding observations.

## DISCUSSION

The increase in the frequency of behaviors in Category Four in all cells, except in Cell Number IV, may be attributable to the point in

time in the student teaching experience during which the observations were made. These final observations were made in the weeks approaching the Christmas holiday. The student teacher, for the most part, had sole control of the classroom.

Generally speaking, the use of the observation instrument tended to increase the frequency of behaviors in Category One. This category encompasses the introductory behaviors that provide focus and relate the lesson to previous lessons.

Perhaps the most revealing cell in the total array is Cell Number IV. This cell tends to reveal the effect of a low ATB teacher on the behaviors of the student teacher. From the display of frequencies in Cell IV, it appears the student teacher may come to the classroom displaying a relatively high level of Active Teaching Behaviors only to have them minimized over time by the cooperating teacher.

The findings related to Cell Number IV are particularly significant in relation to the Situational Analysis wherein it was pointed out that the University of Nevada, Reno does not utilize a cadre of cooperating teachers experienced in the supervision of student teachers.

This study seems to indicate that the use of an observation instrument in tandum with a cooperating teacher who displays high use of Active Teaching Behaviors may increase the use of desirable teaching behaviors. Conversely, failure to use the instrument coupled with a teacher who displays minimal levels of Active Teaching Behaviors may impede student teacher growth and may, in fact, cause a reversal of desirable entry-level behaviors.

Finally, this study tends to indicate the use of the observation instrument is capable of maintaining or enhancing Active Teaching Behaviors without the need for extensive workshops or protocol materials. However,

it does not reveal if the behaviors are lasting or are merely displayed at a point in time.

SUMMARY

This paper describes one component of the Applying Research To Teacher Education: Research Utilization In Elementary Teacher Education (ARTE/RUETE) Project of the Far West Laboratory for Educational Research and Development. This project was initiated under a grant from the National Institute for Education.

The component described in this paper is the research design and findings on The Effect Of An Observation Instrument On Student Teacher Performance Of Active Teaching Behaviors.

Results indicate an observation instrument, when shared with the student teacher, may increase or maintain entry-level behaviors despite the teaching behaviors of the cooperating teacher. Conversely, placement of the student teacher with a cooperating teacher who displays low levels of the behavior and who fails to use the observation instrument may result in a loss of desirable behaviors.

APPENDIX A

Dear Cooperating Teacher:

Some while ago I interviewed you about a series of topics in education. At that time I informed you that I was working on a research project with the Far West Laboratory for Educational Research and Development.

I am now in the second phase of that project, and need to ask your permission to observe you teaching mathematics on three different days. In no way will your name be used, nor will the identity of the classes be revealed.

If you grant your permission, I will share the observation instrument with you after the three observations. It will then be necessary to observe your student teacher teaching mathematics on three occasions. This last observation will take place in October.

I have enclosed a return envelope and a permission slip. This activity has been cleared with the Research Director of the Washoe County School District.

Finally, I want to assure you that in no way will this project be used to your personal disadvantage.

Sincerely,

Kenneth W. Johns, Ed.D.
Project Director

kwj
Enclosures:
Permission Slip
Return Envelope

APPENDIX B

## ARTE: RUETE
## Active Teaching Behaviors (ATB)

The observation system described here is designed to reflect behavioral evidence of active teaching behaviors during direct instruction in the classroom. It provides a common language for discussion and serves as an indicator of the presence of some characteristics of effective instruction.

The active teaching constructs structure the collection of as much instructional information as possible. The observer focuses on the teacher and what s/he is doing. Observers will record information about instruction for the duration of one complete lesson period including sequence, frequency, and field note descriptions. This calls for continuous monitoring of the teacher during instruction in a basic skills lesson. The observation form presents a minute by minute account of how instruction is conducted. Behaviors should be recorded specifically and in as much detail as possible.

The following sections identify the categories and variables of instructional behaviors you will be observing and describing, discuss the observation sheet on which you will record information, and presents the procedures for accurate and complete reporting.

### ATB Observation Categories and Variables

The categories and variables reflect recent research on effective instruction and focus upon the elements of instruction. Therefore, observers focus on teacher behavior related to delivering instruction. Potentially there are many things about instruction in which one could be interested, however, for purposes of reflecting the active teaching constructs observers focus only on the teacher's behavior and how students respond to this. Essentially, we are interested in four categories:

1. How the teacher introduces instruction.
2. How the teacher carries out instruction.
3. How the teacher maintains student engagement.
4. How the teacher concludes instruction.

These four categories are thought of as the core of instruction and represent events which occur in the stream of instruction as a teacher presents lessons to students. Generally, the four elements occur in a cycle: a teacher introduces the lesson, presents new information, establishes and maintains students in the activity, and summarizes the instruction presented. During instruction a teacher cycles back through these four categories and switches among them.

The task of the observer is to describe precisely and objectively how the teacher does these things. Naturally, each teacher does any of these things in different ways. In fact, teachers use many different strategies to accomplish any one of these things. It is not possible to list the many ways in which each of these four categories of instruction might be expected to look during observations. However, based on previous research we can speculate about the various ways in which each of these four categories might be manifested. These are provided in the discussion which follows.

Introduction

1. Stated goals/objectives: Teacher opens with a statement of the purpose of the lesson; what the student is to learn. The intent is to focus the lesson, alert the student to intended objectives, and to what s/he is to produce. Example: "Today we will study prefixes, which will help you to read hard words better and faster."

2. Outlined lesson: Teacher informs student of how the lesson will proceed, activities to follow, tasks to be completed, and sets time limits. Example: "First I will tell you about wolves, then you will write a story about them. We will finish by 11 o'clock."

3. Explained concepts/definitions: Teacher introduces the definitions in advance, or in context; may provide handouts, use visuals, etc.; teacher states the concept in a clear statement in order to highlight for student awareness. Example: "Deciduous trees, like maple and apple trees, lose their leaves in the winter."

4. Reviewed goals/previous instruction: Teacher connects today's lesson with previous lesson by tying the two together with a statement such as, "Yesterday we went on a field trip to a farm and today we will study animals that live on a farm."

Instruction

5. Gave directions: Teacher provides directions for activities. Example: "First you will underline each vowel in the word, and then you will write a sentence using the whole word."

6. Didactic/lecture: Teacher makes direct, straightforward presentation of material through lecture, film, etc. Basically this is a one-way communication.

7. Illustrated, modeled, demonstrated: Teacher gives a verbal illustration of an instance that exemplifies the concept of focus, provides a graphic arts illustration, uses the chalkboard to illustrate a point, visually demonstrates using media, or provides behavioral enactment of the desired action.

8. Questioned: Open/concepts/understanding: Teacher asks questions which are open-ended, relate to concepts being presented, and/or checks for student understanding of content. Example: "What would happen if we didn't capitalize some words?"

9. Questioned: Closed/facts: Teacher asks closed questions of a factual nature; recall questions; moves lesson along with a quick check. Example: "Now who can name the three causes of the Civil War?"

10. Answered: Content/questions: Teacher responds to student questions related to the content being taught. Example: "Yes, dinosaur fossils could be found under the ocean."

11. Answered: Procedural questions: Teacher responds to student questions about procedures, how to perform assigned tasks, etc. Example: "No, first you should write the word and then cover your paper and spell it."

12. Provided feedback: Teacher communicates to students if answer/work/procedures are correct or incorrect. Example: "That's right. You remembered to indent all your margins."

Closure

13. Summarized lesson/work: Teacher restates/provides overview of material presented together with procedures and tasks accomplished. Example: "Today we learned three things about tadpoles and wrote a poem about them."

14. Collected work: Teacher requests students to turn in their work. Example: "Please pass your paper to the person on your left."

Maintenance

15. Restated class rules: Teacher reminds students of appropriate behaviors/procedures by restating class rules. Example: "Remember, we always use 'walking feet' in our classroom."

16. Told to attend: Teacher reminds students to listen, to participate, to be "on task", or to attend to current instructional activity. Example: "Mike, your eyes need to be on your own paper."

17. Roamed room: Teacher walks among students. Purpose may be to check work, management, etc.

18. Signalled (non-verbal): Teacher gestures, stares, or otherwise indicates modification in student behavior. Example: Teacher puts finger to her lips for quiet.

19. Scanned room: Teacher looks around the classroom to monitor engagement and/or "on task" behavior.

20. Disciplined: Teacher intervenes regarding disruptive behavior on the part of a student. Example: Sending the student from room.

## ATB Observation Procedures

The observation task is two fold: (1) categorizing the frequency of observed variables, and (2) describing instructional behaviors of the teacher. Both are completed on a minute by minute basis. These two tasks are described in this section.

Recording the frequency of instructional behaviors involves selecting one of 20 variables which best characterizes the teacher's behavior that occurred during the minute being coded. These 20 variables are designed to be sufficiently flexible so that instructional behaviors can be assigned to one of the variables.

Once the variable has been selected and checked, the observer must write a description of the specific action or language which exemplifies the variable.

Steps for completing the observation recording sheet are:

1. Circle the appropriate site number as designated by your trainer.

2. Enter the name of the teacher for "CLASS."

3. Enter the sheet number for the lesson you are observing. Each complete lesson will begin a different series of sequential numbers.

4. Enter the date [month/day/year] of the observation day. For October 14, 1983 enter "10/14/83."

5. The actual recording of variables is in two parts:

   a. Beginning with the first minute of the lesson, and continuing minute-by-minute through the entire lesson, place a checkmark in one appropriate variable column

for the teacher behavior observed. For example, if during the fifth minute of the lesson you see the teacher leave her desk and walk among the students' desks, then you would place a checkmark in row 5, column 17: Roamed room.

Enter only <u>one</u> checkmark for each minute of observation. If you observe more than one variable in any given minute, place a check in the one variable column you feel reflects the behavior emphasized by the teacher.

b. Immediately after you have placed a checkmark in one variable column which corresponds to the appropriate minute row, write a phrase describing the behavior of the teacher during that minute in the "Description" column. These descriptions will be brief. For the example above, if you observed the teacher roaming the room and s/he stopped at the desk of a child who was talking loudly to another student several seats away about the pencils and erasers in his pocket, you might write "Roaming, stopped at desk,child calling out, put hand on child's shoulder, child attended to worksheet."

If information is made available later in the lesson which sheds light on the context and purpose of the lesson, codes can be changed.

6. After the entire lesson is finished, you must record two more observations. These last two recordings are based on your sense of the lesson as a whole.

a. At the top of your first sheet (sheet # 1) in the information box, which appears on the left half of the sheet, and below the dotted line, place one checkmark. Below "MOMENTUM" a check is placed beside "YES" if you felt the teacher was able to sustain students' interest, moved the lesson forward at an appropriate pace, and accomplished stated lesson objectives. Place a checkmark by "NO" if you do not think momentum was sustained.

b. One checkmark is placed by "YES" for "DIFFERENTIATED INSTRUCTION" if you feel the teacher paced, restructured, or re-taught the lesson to meet student needs. Place a checkmark by "NO" if you feel the teacher did not show this flexibility.

7. Sum the checkmarks in each column for each sheet. Enter the sum for each column, 1 through 20, in the row "TOTAL". If no checkmark appears, enter a zero (0) in the column. The total of sums, column 1 through 20, for each sheet should be no more than 7.

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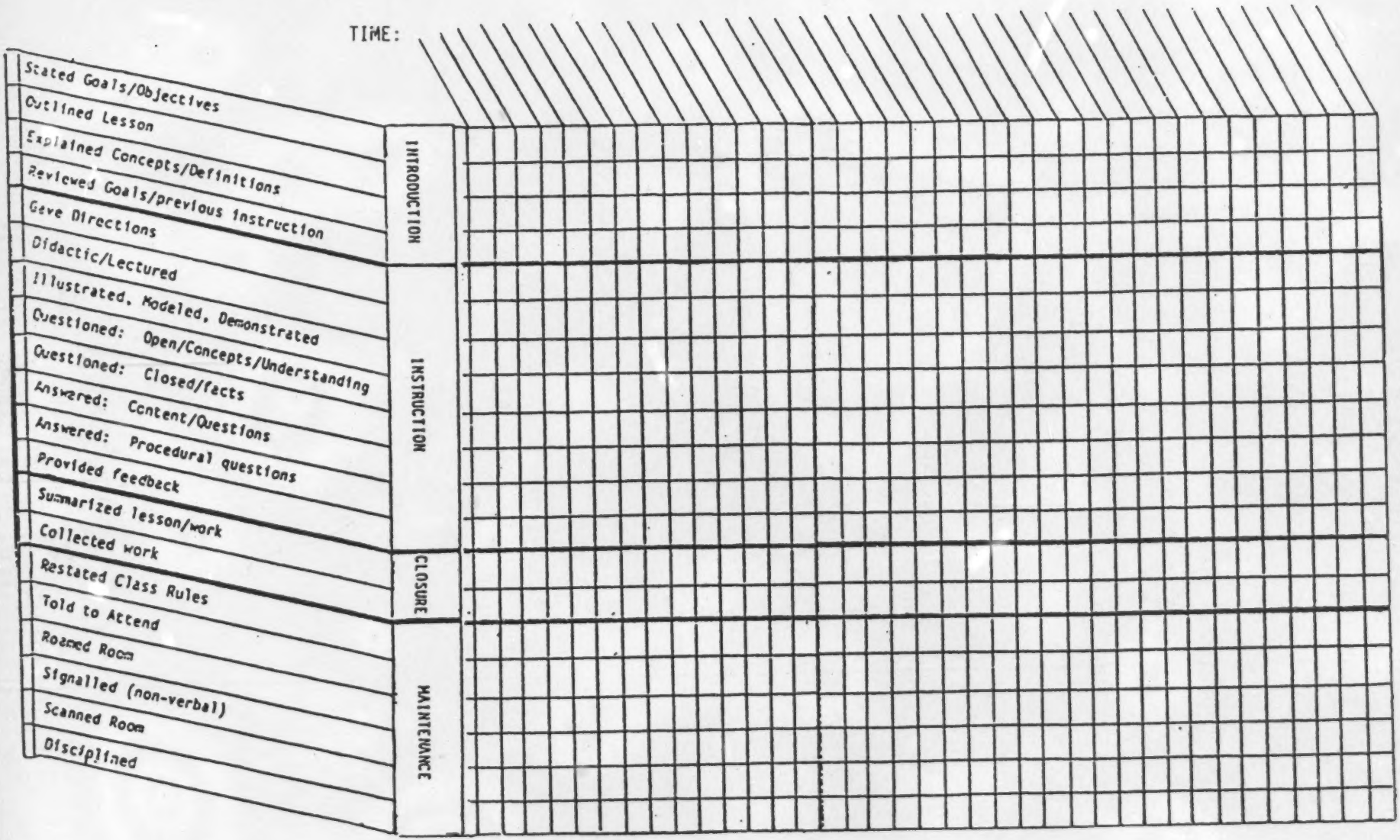
ACTIVE TEACHING BEHAVIOR
OBSERVATION RECORD

TIME:




Momentum:

Yes_____ No _____

Differentiated Instruction:

Yes_____ No_____

Class:_____

Site: _____

Date:





APPENDIX C

## REFERENCES


Anderson, L., Evertson, C. and Brophy, J. "An Experimental Study of Effective Teaching in First Grade Reading Groups," Elementary School Journal. Vol. 79, No. 4, March, 1978.

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Good, Thomas. "Teacher Effectiveness in the Elementary School," Journal of Teacher Education. Vol. XXX, No. 2, March-April, 1979.

Seperson, Marvin A. and Joyce, Bruce R. "Teaching Styles of Student Teachers As Related to Those of Their Cooperating Teachers," Educational Leadership. November, 1973, 146-151.